Michigan Department of Transportation 5100B (07/07)

CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

Exhibit B

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Dionisia Tebbe	100539C	33043

DESCRIPTION IF NO JN/CS

MDOT PROJECT MANAGER: Check all items to be included in RFP. WHITE = REQUIRED GRAY SHADING = OPTIONAL Check the appropriate Tier in the box below			**CONSULTANT:** Provide only checked items below in proposal.
☐ **TIER I ($25,000-$99,999)**	☒ **TIER II ($100,000-$250,000)**	☐ **TIER III (>$250,000)**	
☐	☒	☐	Understanding of Service
☐	☐	☐	*Innovations*
☐	☐	☐	*Safety Program*
N/A	☒	☐	Organization Chart
☐	☒	☐	Qualifications of Team
☐	☒	☐	Past Performance
Not required as part of official RFP	Not required as part of official RFP	☐	Quality Assurance/Quality Control
☐	☒	☐	**Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages (MDOT forms not counted) **(No Resumes)**	7 pages (MDOT forms not counted)	19 pages (MDOT forms not counted)	Total maximum pages for RFP **not including key personnel resumes**

REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and/or "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services>Vendor/Consultant Selections**

RFP SPECIFIC INFORMATION

☑ BUREAU OF HIGHWAYS ☐ BUREAU OF TRANSPORTATION PLANNING ** ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☐ NO ☑ YES DATED 7/1/07 THROUGH 9/30/07

☑ **Prequalified Services** – See page 2 of the attached Scope of Services for required Prequalification Classifications.

☐ **Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.

☑ **Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

For all Qualifications Based Selections, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

** **For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning **(see address list, page 2)**. The priced proposal must be submitted in a sealed envelope, clearly marked **"PRICED PROPOSAL."** The vendor's name and return address MUST be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

☐ **Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, if QBS/low bid selection to the address indicated below. The bid sheet(s) must be submitted in a sealed envelope, clearly marked **"SEALED BID."** The vendor's name and return address MUST be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

PROPOSAL/BID SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
3	12/4/07	4:00 pm

PROPOSAL AND BID SHEET MAILING ADDRESSES

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

☑ MDOT Project Manager ☐ MDOT Other

Dionisia Tebbe
3101 Technology Blvd., Suite H
Lansing, MI 48910

Mail one additional stapled copy of the proposal and/or bid sheet(s) to the Lansing Office indicated below.

Lansing Regular Mail	OR	Lansing Overnight Mail
☑ Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
☐ Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

MDOT FORMS REQUIRED AS PART OF PROPOSAL/BID SUBMISSION

5100D – Request for Proposal Cover Sheet
5100G – Certification of Availability of Key Personnel
5100 I -- Conflict of Interest Statement

(These forms are not included in the proposal maximum page count.)

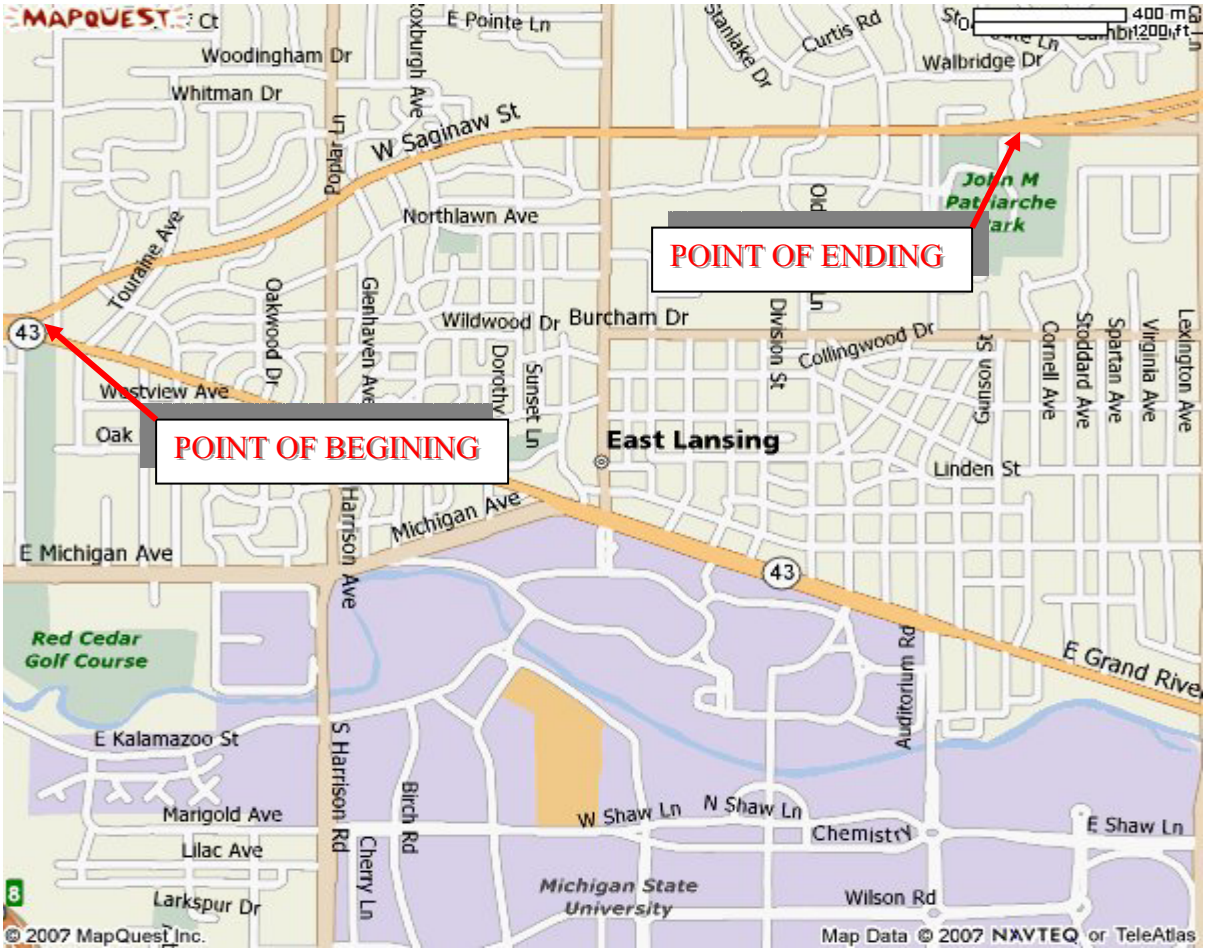
Michigan Department of Transportation

SCOPE OF SERVICE
FOR
DESIGN SERVICES

CONTROL SECTION: 33043

JOB NUMBER: 100539C

PROJECT LOCATION:
The project is located on I-69BL (Saginaw Street) from Coolidge Road to Stonegate Lane in the city of East Lansing in Ingham County. The project length is 2.2 miles.



PROJECT DESCRIPTION:
Work involved in the design of the project consists of: Non-Motorized Pathway Construction including ADA ramps, earthwork and retaining wall investigation and construction for ADA compliant pathway, and drainage improvements as required for non-motorized trail.

ANTICIPATED SERVICE START DATE: 02/26/2008

ANTICIPATED SERVICE COMPLETION DATE: 03/01/2009

PRIMARY PREQUALIFICATION CLASSIFICATION(S)
Roads & Streets

SECONDARY PREQUALIFICATION CLASSIFICATION(S)
Right-of-Way Surveys
Road Design Surveys
Maintaining Traffic Plans & Provision
Specialty Walls/Slopes
Geotechnical Engineering Services
Pavement Marking

DBE REQUIREMENT: 5%

MDOT PROJECT MANAGER:
Dionisia Tebbe - Assistant Development Engineer
Lansing TSC
3101 Technology Blvd.,Suite H
Lansing, MI 48910
Phone Number: 517-324-2270
E-mail: tebbed@michigan.gov

CONSTRUCTION COST:

A. The estimated cost of construction is:

1.	**Environmental (Tree Removal & Replacement)**	**$20,000**
2.	**Drainage**	**$10,000**
3.	**Safety**	**$10,000**
4.	**Non Motorized**	**$550,500**
5.	**Maintaining Traffic (Pedestrian)**	**$15,000**
6.	**Detours and Maintaining Traffic**	**$15,000**
7.	**Retaining Wall**	**$247,500**
8.	**Miscellaneous**	**$200,100**
	CONSTRUCTION TOTAL	**$1,058,100.00**

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.

REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, AASHTO Guide for the Development of Bicycle Facilities, AASHTO Guide for the Development of Pedestrian Facilities, FHWA Designing Sidewalks and Trails for Access: Part I: Review of Existing Guidelines and Practices & Part II: Best Practices Design Guide, and
etc.).

NOTE: A process change mandated by federal audit of MDOT's design process puts the Omissions and Errors Check Meeting after the Plan Completion. Please keep this in mind when preparing your schedule. See MDOT Road Design Manual, Chapter 14 – Procedures – Section 14.54 for corroboration. See "For Your Information" contacts at the end of this document for more info or questions.

Consultant is required to use MDOT's current version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. Consultant shall comply with all MDOT CADD standards and file naming conventions.

CONSULTANT RESPONSIBILITIES:

Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

A. Perform design surveys, Right-of-Way surveys, and mapping. See Attachment A for details.

B. Prepare Right-of-Way plans as required to locate, verify and obtain construction access permits for this project. Proposed Right-of-Way grading permits are anticipated for this project.

C. A non-motorized pathway location feasibility study will be required as part of the Base Plan Review and Prepare Structure Study portion of this project. This study will consider existing conditions such as wetlands, slopes, drainage, and R.O.W. along the corridor and required standards to provide specific location recommendations. These recommendations may include but are not limited to filling ditches and enclosing drainage, retaining walls, bridging wetland, and gapping out pathway if constraints warrant.

D. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.

E. Compute and verify all plan quantities.

F. Prepare staging plans and special provisions for maintaining traffic during construction.

G. Provide solutions to any unique problems that may arise during the design of this project.

H. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

I. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

J. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Preliminary Project Assessment (PPA).

K. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.

L. The Consultant will provide to MDOT at the scheduled submittal dates, copies of the required specifications and plan set materials for distribution by MDOT for all reviews for this project. The Consultant shall contact the project manager prior to the submittal dates for the exact number of copies that will be required for submittal.

M. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (ie. county drain commission) and related mitigation. MDOT will submit permit requests.

N. Attend any project-related meetings as directed by the MDOT Project Manager.

O. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.

P. Obtain soil borings for pathway and for any retaining walls/specialty slopes that maybe required. Perform foundation analysis for tertaining wall design, prepare and submit geotechnical report if required.

Q. The Consultant shall assist in the review of utility permit requests, incorporate the information in the design plans, and respond within 2 weeks from receipt of the permit.

R. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.

S. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

UTILITIES

The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project. The Consultant will be responsible for miscellaneous staking for the purposes of identifying and resolving utility conflicts.

TRAFFIC CONTROL

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services. Contact the TSC Traffic Engineer, Steve Shaughnessy, at (517) 324-2263 regarding traffic control requirements.

MDOT PERMITS

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

MONTHLY PROGRESS REPORT

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager.

MDOT RESPONSIBILITIES:

A. Schedule and/or conduct the following:
   1. Project related meetings.
   2. The Base Plan Review
   3. The Plan Review
   4. Utility Meetings
   5. The Omission/Errors/Check Meeting
   6. Quantity summary sheets and final item cost estimates.
   7. Packaging of plans and proposal.

B. Furnish Special Details and pertinent reference materials.

C. Furnish prints of an example of a similar project and old plans of the area, if available.

D. Obtain all permits for the project as outlined in previous section.

E. Coordinate requests for utility information and coordinate any necessary utility relocation.

F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

DELIVERABLES:

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, etc.) on DVD, CD or uploaded to ProjectWise, as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names as shown in Appendix A of the Road Design Manual. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted in their native format with standard naming conventions as well as combined into one Adobe PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capturing a legally signed document or a hard copy version of a document is all that exists.

Plan files shall be submitted in their native dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF with full text search and level on/off capabilities in half size (11" x 17") formats. An 11 x 17 title sheet shall be plotted stamped and signed then scanned for inclusion with the Adobe PDF set. The original title sheet will be sent to the MDOT Project Manager.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the txt and csv files necessary for import into the Trns*port bid letting software. The SAPW files shall be transmitted electronically by the method specified by the MDOT Project Manager.

The project will require a scale of **1' = 40' (English Units)**

Other plan sheets that are required for this project shall be completed by the Consultant. These include, but are not limited to the following plan sheets:

A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.

B. Note Sheet.

C. Legend Sheet

D. Typical Cross-Sections.

E. Project specific Special Details.

F. Construction staging and traffic control plans.

G. Detail grade sheets for critical areas.

H. Witness and benchmark sheet(s).

I. Soil boring log sheet(s).

J. Retaining Wall plan(s).

K. Profile sheet(s) with a five line profile will be required as part of the retaining wall plans detailing the elevations at the top of wall, bottom of wall, finish grade behind the wall, finish grade in front of the wall, and original ground.

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.

All plans, specifications, and other project related items are subject to review and approval by MDOT.

PROJECT SCHEDULE:

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the P/PMS Task Manual for more details.

Study (Early Preliminary Engineering)

Yes	No	P/PMS Task Number and Description	Date To Be Completed By (mm/dd/yyyy)
		EPE Scoping Analysis	
☐	☒	2120 Prepare Traffic Analysis Report	/ /
☐	☒	2130 Prepare Project Justification	/ /
☐	☒	*213M Concurrence by Regulatory Agencies with the Purpose and Need*	/ /
☐	☒	2140 Develop and Review Illustrative Alternatives	/ /
☐	☒	2155 Request/Perform Safety Analysis	/ /
☐	☒	2160 Prepare and Review EIS Scoping Document	/ /
☐	☒	*211M Public Information Meeting*	/ /
		EPE Draft Analysis	
☐	☒	2310 Conduct Technical SEE Studies	/ /
☐	☒	2321 Prepare for Aerial Photography	/ /
☐	☒	2322 Finish/Print Aerial Photography	/ /
☐	☒	2330 Collect EPE Geotechnical Data	/ /
☐	☒	2340 Develop and Review Practical Alternatives	/ /
☐	☒	*233M Aerial Photography Flight*	/ /
☐	☒	*234M Concurrence by Regulatory Agencies with the Alternatives for Study*	/ /
☐	☒	2360 Prepare and Review EA or DEIS	/ /
☐	☒	*231M Draft Submission to FHWA*	/ /
☐	☒	2380 Circulate EA or DEIS	/ /
☐	☒	*232M Public Hearing*	/ /

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Study (Early Preliminary Engineering)

Yes	No	P/PMS Task Number and Description	Date To Be Completed By (mm/dd/yyyy)
		EPE Final Analysis	
☐	☒	2510 Determine and Review Recommended Alternative	/ /
☐	☒	*250M Concurrence by Regulatory Agencies with Recommended Alternative*	/ /
☐	☒	2525 Prepare and Review Engineering Report	/ /
☐	☒	2530 Prepare and Review Request for FONSI or FEIS	/ /
☐	☒	*252M Final Submission to FHWA*	/ /
☐	☒	2550 Obtain FONSI or ROD	/ /
		Contamination Investigation	
☐	☒	2810 Project Area Contamination Survey (PCS)	/ /
☐	☒	2820 Preliminary Site Investigation (PSI) for Contamination	/ /

Preliminary Engineering

		Design Scope Verification and Base Plans Preparation	
☒	☐	3130 Verify Design Scope of Work and Cost	02/20/2008
☐	☒	3310 Prepare Aerial Topographic Mapping / /	
☐	☒	3320 Conduct Photogrammetric Control Survey	/ /
☐	☒	3321 Set Aerial Photo Targets	/ /
☒	☐	3330 Conduct Design Survey	04/16/2008
☐	☒	3340 Conduct Structure Survey	/ /
☐	☒	3350 Conduct Hydraulics Survey	/ /
☒	☐	3360 Prepare Base Plans	05/29/2008
☐	☒	*311M Utility Notification*	/ /
☐	☒	3361 Review and Submit Preliminary ROW Plans	/ /
☐	☒	*331M Preliminary ROW Plans Distributed*	/ /
☒	☐	3370 Prepare Structure Study	05/29/2008
☐	☒	3375 Conduct Value Engineering Study	/ /
☐	☒	3380 Review Base Plans	/ /
☐	☒	*332M Base Plan Review (Pre-GI Inspection)*	/ /
☐	☒	3390 Develop the Maintaining Traffic Concepts	/ /
		Preliminary Plans Preparation	
☒	☐	3510 Perform Roadway Geotechnical Investigation	07/25/2008
☐	☒	3520 Conduct Hydraulic/Hydrologic and Scour Analysis	/ /
☐	☒	3522 Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	/ /
☒	☐	3530 Conduct Structure Foundation Investigation	07/25/2008

Preliminary Engineering (cont'd)

Yes	No	P/PMS Task Number and Description	Date To Be Completed By (mm/dd/yyyy)
		Preliminary Plans Preparation (cont'd)	
☐	☒	3535 Conduct Structure Review for Architectural and Aesthetic Improvements	/ /
☒	☐	3540 Develop the Maintaining Traffic Plan	07/25/2008
☐	☒	3551 Develop Traffic Signal Operations Plan	/ /
☒	☐	3552 Develop Preliminary Pavement Marking Plan	07/25/2008
☐	☒	3553 Develop Preliminary Non-Freeway Signing Plan	/ /
☐	☒	3554 Develop Preliminary Freeway Signing Plan	/ /
☒	☐	3570 Prepare Preliminary Structure Plans	07/25/2008
☒	☐	3580 Develop Preliminary Plans	07/25/2008
☐	☒	3581 Review and Submit Final ROW Plans	/ /
☐	☒	*351M Final ROW Plans Distributed*	/ /
☒	☐	3590 Review Preliminary Plans (Hold Plan Review Meeting)	09/08/2008
☒	☐	*352M THE Plan Review (Grade Inspection)*	08/22/2008
		Utilities	
☒	☐	3610 Compile Utility Information	09/08/2008
☒	☐	3660 Resolve Utility Issues	11/03/2008
☐	☒	*360M Utility Conflict Resolution Plan Distribution*	/ /
☐	☒	*361M Utility Meeting*	/ /
☐	☒	3670 Develop Municipal Utility Plans	/ /
☐	☒	3672 Develop Special Drainage Structures Plans	/ /
☐	☒	3675 Develop Electrical Plans	/ /
		Mitigation/Permits	
☐	☒	3710 Develop Required Mitigation	/ /
☐	☒	3720 Submit Environmental Permit Applications	/ /
☐	☒	3730 Obtain Environmental Permit	/ /

Preliminary Engineering (cont'd)

Yes	No	P/PMS Task Number and Description	Date To Be Completed By (mm/dd/yyyy)
		Final Plan Preparation	
☐	☒	3821 Prepare/Review Traffic Signal Plan	/ /
☒	☐	3822 Complete Permanent Pavement Marking Plan	11/03/2008
☐	☒	3823 Complete Non-Freeway Signing Plan	/ /
☐	☒	3824 Complete Freeway Signing Plan	/ /
☒	☐	3830 Complete the Maintaining Traffic Plan	11/03/2008
☒	☐	3840 Develop Final Plans and Specifications	11/03/2008
☒	☐	*380M Plan Completion*	11/05/2008
☒	☐	3850 Develop Structure Final Plans and Specifications	11/03/2008
☒	☐	3870 Hold Omissions/Errors Check (OEC) Meeting	12/01/2008/
☒	☐	*387M Omissions/Errors Checks Meeting*	11/20/2008
☒	☐	*389M Plan Turn-In*	12/09/2008
☐	☒	3880 CPM Quality Assurance Review	/ /

Preliminary Engineering – Right Of Way

		Early Right Of Way Work	
☐	☒	4120 Obtain Preliminary Title Commitments	/ /
☐	☒	4130 Prepare Marked Final Right Of Way Plans	/ /
☐	☒	*413M Approved Marked Final ROW*	/ /
☐	☒	4140 Prepare Property Legal Instruments	/ /
		ROW Acquisition	
☐	☒	4411 Preliminary Interviews	/ /
☐	☒	*441M Post-Decision Meeting*	/ /
☐	☒	4412 Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization	/ /
☐	☒	4413 Appraisal Reports	/ /
☐	☒	4420 Appraisal Review Reports	/ /
☐	☒	4430 Acquire Right Of Way Parcels	/ /
☐	☒	4510 Conduct Right Of Way Survey & Staking	/ /
		ROW Relocation	
☐	☒	4710 Relocation Assistance	/ /
☐	☒	4720 Prepare Improvement Removal Plan	/ /
☐	☒	*442M ROW Certification*	/ /

PAYMENT SCHEDULE

Compensation for this Scope of Services shall be on an **actual cost plus fixed fee** basis.

CONSULTANT PAYMENT:

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for Services rendered shall not exceed the "Actual Cost Plus Fixed Fee, Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Consultant. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this Project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Engineer Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Engineer Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

FOR YOUR INFORMATION

For questions on specific tasks, refer to the P/PMS Task Manual located on the MDOT Bulletin Board System.

For assistance in accessing this manual, please contact one of following:

Dennis Kelley: (517) 373-4614

Tonya Nobach: (517) 335-1927

ATTACHMENT A

SURVEY SCOPE OF WORK

(Current version as of Feb.'07)

Survey Limits: From the east side of Coolidge Street at the intersection with Business Route I-69 (Saginaw Street) thence east along Saginaw Street to the east side of Alton Street for the south side and to the east side of Stonegate Lane for the north side. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan. See Mapping for more details.

NOTES: The Selected Consultant shall discuss the scope of this survey with the MDOT Lansing Design Surveyor, Thomas W. Benson at Bensont2@Michigan.Gov or (517) 373-0020 before submitting a priced proposal.

The Selected Consultant surveyor must contact Steve Shaughnessy, the Lansing TSC Traffic and Safety Engineer at ShaughnessyS@Michigan.Gov or (517) 324-2263 for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan must** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as traversing, leveling, mapping, etc., **must** be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

GENERAL REQUIREMENTS:

1. Surveys must comply with **all Michigan law** relative to land surveying.

2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan.

3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, and/or Ground Control (Photogrammetric) must be completed by a survey firm which is pre-qualified by MDOT for that category.

4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2007, the MDOT Design Survey Manual on-line, and the MDOT RTK guidelines. Please contact the Design Survey office to clarify any specific questions regarding these standards.

5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section.

6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).

7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.

8. The consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.

9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.

10. Measurements, stationing, recorded data, and computations must be in **International Feet**, unless specified otherwise by the MDOT Project Manager.

11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83. All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan. A preliminary submittal of the adjusted Horizontal and Vertical control for the project may be submitted to the MDOT Survey Consultant Coordinator or Region Surveyor for review and acceptance as soon as it is available.

12. The survey notes must be submitted to the Design Survey Unit in 10" by 12" divided portfolios with flap covers. As many portfolios should be used as are needed to contain all of the required documents and Compact Discs (CD's) or DVD's. **Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor".**

13. Each portfolio must be labeled on the outside as in the following example:

    Survey Notes for:
    Route, Location and Project Limits [I-94 under Beaubien Street]
    Control Section [S06 of 82024] Job Number [45197D] Date [*of submittal*]
    By [*Name of Firm*]
    Michigan Professional Surveyor [ ] License # [ ]

14. Each submittal is to be divided into six sections. These sections are to be labeled as follows: **Administrative, Alignment, Control**, **Property**, **Mapping**, and **Miscellaneous**.

15. **All data**, whether electronic or paper, **must be recorded on non-rewritable Compact Discs** (CD's). All paper files, including MicroStation files, must be scanned and/or converted to Adobe Acrobat .PDF format. CD's must be organized in the same manner as the portfolio, such as by Administrative section, Control section, etc. A Table of Contents in Adobe Acrobat format is required that has all .PDF pages of the CD bookmarked/linked so each place in the .PDF archive can be accessed with a single click of the computer mouse. Specified format files such as ASCII text, CAiCE and MicroStation must have separate access. CD's must be labeled with the control section, job number, data type and file names.

16. Each category of survey must be packaged separately (i.e., Structure surveys separate from Road surveys and Hydraulic surveys). All sheets in a portfolio must be marked with the portfolio section, control section, job number, and page number.

17. The Consultant representative shall record and submit typewritten minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees.

18. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to Thomas W. Benson, Survey Consultant Project Manager at Bensont2@Michigan.Gov or (517) 373-0020.

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be sent to** Thomas W. Benson, PS, Survey Consultant Coordinator, Design Support Area, and P.O. Box 30050, Lansing, MI 48909. Please use MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must also be sent to the MDOT Project Manager for Design.

Acceptance of this survey by the MDOT Supervising Land Surveyor and/or the MDOT Project Manager does not relieve the Consultant of any liability for the content of the survey.

WORK RESTRICTIONS

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT Traffic and Safety Engineer, Steve Shaughnessy at ShaughnessyS@Michigan.Gov or (517) 324-2263 at the Lansing TSC prior to submitting a priced proposal.

No work shall be performed or lane closures allowed during the Memorial Day, July 4th, or Labor Day holiday periods, as defined by the MDOT Project Manager or representative specifically designated by the Project Manager.

The Consultant must call the MDOT Region or TSC Traffic and Safety Engineer before beginning work to inform him or her of surveying activity in the area. The MDOT Region or TSC must be notified at least two weeks prior to lane closures so advance notice can be posted on the Web site.

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction,* 2003 edition, www.mdot.state.mi.us/specbook/, and Supplemental Specification 03SS001(2) Errata to the 2003 Standard Specifications and all other supplemental specifications currently in effect against the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard "maintaining traffic" typicals for any and all closures.

Typical MDOT traffic control diagrams are available on line at www.mdot.state.mi.us/tands/plans.cfm

COORDINATION WITH OTHER CONTRACTS IN THE VICINITY

The Consultant shall coordinate his operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.07 of the 2003 Standard Specifications for Construction. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete work unit scheduled.

FIELD SURVEY

The purpose of the field survey is to obtain all information and data required by the project design engineer, to leave control in the field for future construction staking, and to provide a sufficient history of the area to enable the MDOT Design Survey Unit to perform dependable surveys in the future. The Consultant surveyor must discuss the scope of this survey with the project design engineer before initiating any work on this project. Notes of this meeting and a detailed Survey Work Plan with an estimate of hours broken down by specific survey task must be submitted to the MDOT Project Manager and Survey Consultant Project Manager within two weeks of this meeting.

CONTROL

A three dimensional control system must be established throughout the project area. This control shall be based on the Michigan State Plane Coordinate System NAD1983 (2003) horizontal datum and NAVD 1988 vertical datum. All subsequent control must be based on the established control. Any traverse points or bench marks established must adhere to the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2007 and be listed in the Control pocket of the portfolio. Contact the Survey Consultant Coordinator for existing control in the area.

OPUS positioning may be used as a check, and for positioning Primary Control as defined in the MDOT Standards of Practice for Design Survey March 2007. For any and all OPUS solutions, a RINEX format file with a minimum of two hours of GPS data must be included, as well as the OPUS solution (extended version) from NGS. All OPUS solutions must be verified within 0.20 foot, either by a separate OPUS position from an independent occupation, or by a NGS/CORS adjustment.

If GPS-derived elevations are used, the Surveyor's Report and the Witness List and Witness Sheet for the project must clearly state that the vertical datum is "NAVD 1988 GPS-derived from Geoid 03."

GOVERNMENT CORNERS

Any PLSS corners within the project limits must be recovered or established and tied to the project coordinate system. Any PLSS corners necessary for legal alignment determination and/or property ties for Right of Way issues must be recovered or established and tied to the project coordinate system.

All PLSS corners must be recorded in accordance with PA 74 of 1970, as amended, and all applicable administrative rules. A copy of each recorded Land Corner Recordation Certificate must be submitted to the MDOT Design Survey Office as part of the final report. All PLSS corners located in hard surface roads must be protected by a monument box, regardless of impending construction. The consultant shall provide to the Survey Consultant Project Manager a list of any affected Government or Property Controlling Corners in the detailed work plan for discussion or approval.

The Consultant surveyor must contact the County Remonumentation Representative prior to beginning work on the project to inform him of proposed corner perpetuation activities, and to obtain information pertinent to PLSS corners and/or property controlling corners affected by project construction.

ALIGNMENT

Legal Alignment is required for this project. Contact the Lansing Survey unit for research information.

Since most existing alignment points locate and define the boundary between the public Right of Way and private ownership, legal alignment points are considered Property Controlling Corners and must be recovered and recorded in accordance with PA 74 of 1970, as amended, and all applicable administrative rules. A copy of each recorded Land Corner Recordation Certificate must be submitted in the Property Section of the final portfolio.

The Consultant must clearly define in the Work Plan what type of alignment is proposed, and how the stationing will be established, and whether or not the alignment will be staked in the field. An alignment sheet must be prepared and submitted that shows the alignment with stationing and coordinates, and the source of stationing, curve data, and the alignment definition (As Constructed or Legal). Horizontal control points and government corners are also appropriate for this sketch or CADD drawing.

The Consultant must provide an alignment control point list with witnesses in ASCII format for all alignment points found or set. This list must include datum, corner designations, descriptions, coordinates, combined Scale Factor, and witnesses. This list may be appended to the witness list for horizontal and vertical control points.

All monument boxes through the project area must be accounted for by the Consultant surveyor, shown on the project mapping, and have a recorded LCRC submitted with the survey portfolio.

MAPPING

The Mapping limits for this project are as follows:

From the edge of metal / gutter joint line out to the ROW line for both sides of Saginaw Street plus 15 feet or to a dwelling / building face. 100 feet down all cross streets / T intersections plus 100 feet before and after for the driving lane on Saginaw Street, to allow for handicap access ramp design. All visible features (ie: Utilities, sign posts, etc.) need to be located. Topo shots for the development of survey chain lines should not exceed 50 feet and be in a staggered pattern.

The Consultant must submit a **CAiCE software file, named MDOTjob#.zip**, utilizing CAiCE's built-in archive feature, of all survey mapping points and data files for the mapping area. A Digital Terrain Model (DTM), named EXRD and created in CAiCE, must be included for the mapping area. The Consultant is responsible for using the latest MDOT CAiCE Feature Codes, files and tugboat, available on the MDOT File Transfer Protocol (FTP) site. The tugboat can be used to convert CAiCE files into Geopak and MicroStation formats. **The CAiCE software used must be Version 10.5 or newer.**

The Consultant must provide an electronic **MicroStation Intergraph Version 8 format file** of the mapping area. This must be named MDOTjob#PL.dgn, for example **79023pl.dgn,** and must be submitted **in a sub-directory outside of the CAiCE archive file** named "MicroStation." The MicroStation file will be a 2-D file of the planimetric features including contours. This file must be sized appropriately, utilizing the seed file **seedrd.dgn** with working units of 1000 and 1 and

be compiled in standard MDOT format. The Consultant is responsible for using the latest MDOT Resource files, color table, and cell files, available on the MDOT File Library site under CAD_V8. Go to http://mdotwas1.mdot.state.mi.us/public/bbs/

For a comprehensive list of MicroStation level designations, contents and line attributes, refer to the "MDOTV8LEVEL.pdf" table located on the MDOT ftp site at ftp://ftp.michtrans.net/. The consultant Username is "survcons." The consultant password is $urvcon$. This table replaces the former Attachments AA, C & D. Also in the ftp site, the Consultant should refer to the V8GROUP&ALPHA LIST.pdf file for Data Collection Codes.

The Consultant must also submit **files created from CAiCE that are formatted for design in Geopak** software. This can be accomplished by using the MDOT Plans Production CAiCE Tugboat available on the MDOT Design Survey FTP site. The Consultant must submit a 3D MicroStation Triangle file, a Survey Chain (TIN Boundary) around the edited Triangle file with the name and Feature "CLIP", a Job#.OBS file, a Job#.KCP file, a Job#.XYZ file and a Job#.ALI file. Each alignment must be computed separately and uniquely named. These files must be submitted electronically **in a subdirectory outside of the CAiCE archive file** named "Geopak."

POST SURVEY CLEAN-UP

Once the survey is complete, all stakes must be removed to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

FINAL REPORT: DELIVERABLES

The final report for this project shall include:

1. In the first pocket of the portfolio, labeled **ADMINISTRATIVE**, the following will appear:
   a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
   b. The project's Professional Surveyor's Report on company letterhead consisting of:
      i) A comprehensive synopsis of the work performed on this project, signed **and sealed** by the project's Professional Surveyor.
      ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
      iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
   c. CD with all documents scanned or converted into PDF files. Each page must be inserted in a master PDF file and bookmarked for easy retrieval. An example can be provided upon request.
   d. MDOT QA/QC Checklist.

2. In the second pocket of the portfolio, labeled **ALIGNMENT**, the following will appear:
   a. A sketch or CADD drawing of the alignment(s):

i) A statement defining the alignment(s) as **legal or as-constructed**
ii) Stationing, source of stationing, and station equation to existing stationing
iii) Horizontal coordinates
iv) Curve data
v) Alignment points found or set
vi) Control points
vii) Reference lines and angles of crossing (if appropriate)
viii) Government corners

b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point
c. LCRC's for alignment points found.

3. In the third pocket of the portfolio, labeled **CONTROL**, the following will appear:
   a. Documentation of horizontal and vertical datum sources.
   b. OPUS documentation
   c. Least squares adjustments for the horizontal and vertical control.
   d. Text files in ASCII format, hard copy and on CD, which contain the witness lists for the horizontal alignment ties, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof.
   e. A MicroStation V8 file showing the above data.

4. In the fourth pocket of the portfolio, labeled **PROPERTY**, the following will appear:
   a. Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired
   b. Property ties to the project coordinate system with maps, plats, and recorded surveys marked with point numbers, if Right of Way is to be acquired.
   c. Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.

5. In the fifth pocket of the portfolio, labeled **MAPPING**, the following will appear:
   a. Mapping file in MicroStation format, and converted to .PDF format. Hardcopy signed and sealed.
   b. An archived CAiCE software file.
   c. Geopak files.
   d. All field survey notes, electronic data and research records obtained for the project. It is not necessary to submit electronic raw survey data in hardcopy form.
   e. All supporting and supplemental information or data.

6. In the sixth pocket of the portfolio, labeled **MISCELLANEOUS**, the following will appear:
   a. Any photographs taken for clarity of an area
   b. Any newspaper clippings related to the project
   c. Any information not covered in this scope that will be of benefit to the designer or another surveyor

General Notes

a. It is the responsibility of the consultant to insure that all electronic files submitted to MDOT conform to the required format and that all documents are legible.
b. The consultant must organize and label the various sections of the portfolio as required by the Standards of Practice for MDOT Design Surveys dated March 2007.
c. All research documents are required to be scanned and placed on the CD.
d. It is desirable to limit paper and to include as much electronic data as possible on Compact Disc or DVD, including scanned items, to facilitate future electronic storage and transmission of survey data. **Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor".**